Commonwealth of Kentucky
Division for Air Quality

STATEMENT OF BASIS / SUMMARY

Title V, Operating
PERMIT ID: V-23-026
Covalence Specialty Adhesives
2320 Bowling Green Road
Franklin, KY 42134
8/2/2023
William Parsons, Reviewer

Source ID: 21-213-00011
Agency Interest #: 3975
Activity ID: APE20230001

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SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 3069, Fabricated Rubber Products, NEC

Single Source Det. ☐ Yes ☒ No If Yes, Affiliated Source AI:

Source-wide Limit ☐ Yes ☒ No If Yes, See Section 4, Table A

28 Source Category ☐ Yes ☒ No If Yes, Category:

County: Simpson
Nonattainment Area ☒ N/A ☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☐ Ozone ☐ Lead
If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant ☒ Yes ☐ No
If yes, for what pollutant(s)?
☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☒ VOC

PTE* greater than 250 tpy for any criteria air pollutant ☐ Yes ☒ No
If yes, for what pollutant(s)?
☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☐ VOC

PTE* greater than 10 tpy for any single hazardous air pollutant (HAP) ☒ Yes ☐ No

If yes, list which pollutant(s): Toluene, Xylene

PTE* greater than 25 tpy for combined HAP ☒ Yes ☐ No

*PTE does not include self-imposed emission limitations.

Description of Facility:
Covalence Specialty Adhesives manufactures a wide variety of industrial tapes, including duct, athletic, industrial, medical, hot melt, and pipeline tapes, in several colors and widths with various backings. The first step in making the tapes is mixing rubber, zinc oxide, oil, clay and natural resins in mixers then further compounding the mixture on rolling mills. The adhesive is then calendered with a fabric substrate and plastic backing. A calender line is a series of hard pressure rollers used to form or smooth a sheet of material to give uniform thickness. The tape is slit to the desired width and wound onto rolls.

SECTION 2 – CURRENT APPLICATION

Permit Number: V-23-026 Activities: APE20230001

Received: June 15, 2023 Application Complete Date(s): July 24, 2023

Permit Action: ☐ Initial ☒ Renewal ☐ Significant Rev ☐ Minor Rev ☐ Administrative

Construction/Modification Requested? ☐Yes ☒No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action ☒Yes ☐No

Description of Action:
APE20190003 502(b)10 change:
The Division received an application October 10, 2019 for the installation of a 29.5 HP natural gas emergency generator. This generator is listed in the permit as EP 127.

APE20200001 502(b)10 change:
The Division received an application February 5, 2020 for the replacement of the EP 43 mill. The mill was renumbered to #12 making mill from the #9 making mill in Section C. The new mill is subject to 401 KAR 59:010 instead of 401 KAR 61:020.

APE20230001 Renewal:
The Division received an application June 15, 2023 for the renewal of the facility's permit. In this renewal it was requested to remove EP #68 Powercrete Part A Storage tank, EP #71 Powercrete Part A storage tank, and EP #122 Powercrete Production and Packaging insignificant activities in addition to a like-kind replacement of EP #110 0.5 MMBtu Burn-off oven. No changes to the permit were made as a result of the replacement of the burnoff oven.

Permit language has been updated to be consistent and clear and incorporate any regulatory changes since the last permit action.

V-23-026 Emission Summary		
Pollutant	2022 Actual (tpy)	PTE V-23-026 (tpy)
CO	14.28	30.63
NOx	17.04	38.58
PT	4.06	18.89
PM_{10}	4.06	18.86
$PM_{2.5}$	1.46	8.57
SO_2	0.104	0.32
VOC	14.88	101.4
Lead	8.4E-5	0.00018
Greenhouse Gases (GHGs)		
Carbon Dioxide	20390	43103
Methane	0.39	1.34
Nitrous Oxide	0.37	0.081

CO_2 Equivalent (CO_2e)	20511	43160
Hazardous Air Pollutants (HAPs)		
Ethyl Benzene	0	4.62
N-Hexane	N/A	0.65
Toluene	4.41	32.96
Vinyl Acetate	0	0.69
Xylenes	0	22.95
Combined HAPs:	4.41	61.97

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Point 01 Primary Boiler for Specialty Adhesives, Emission Point 03 Primary Boiler for Industrial (Polyken)				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM	0.40 lb/MMBtu	401 KAR 59:015, Section 4(1)(c)	AP-42 Chapter 1.4.	Assumed based upon natural gas combustion
Opacity	20% opacity	401 KAR 59:015, Section 4(2)	N/A	Assumed based upon natural gas combustion
SO_2	1.70 lbs/MMBtu	401 KAR 59:015, Section 5(1)	AP-42 Chapter 1.4.	Assumed based upon natural gas combustion

Initial Construction Date : 2009 for each

Process Description:
Two natural gas fired boilers, 8.165 MMBtu/hr each.

Applicable Regulation:
401 KAR 59:015, *New Indirect Heat Exchangers* applies to indirect heat exchangers having a heat input capacity greater than one (1) million BTU per hour (MMBTU/hr) commenced on or after April 9, 1972, for an affected facility with a capacity of 250 MMBTU/hr heat input or less

401 KAR 63:002, Section 2.(4)(iiii), 40 C.F.R. 63.7480 to 63.7575, Tables 1 to 13 (Subpart DDDDD), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* applies to new, reconstructed, and existing industrial, commercial, or institutional boilers or process heaters, located at a major source of hazardous air pollutants.

Comments:
Emission Units 01 and 03 were replaced in 2009 with boilers that have a different MMBtu/hr, but were not given new emissions unit numbers at that time. The previous boilers were 8.375 MMBtu/hr.

Allowable emissions for the units are calculated using 401 KAR 59:015, Section 3(1) using the total rated heat input capacity of all affected facilities at a source.

PM Emission Limit, 401 KAR 59:015 Section 4.(1)(c); $0.40 = 0.9634 * (8.369 + 8.165 + 8.165 + 8.375 + 3.38 + 1.66 + 1.66)^{-0.2356}$
Sulfur Dioxide Emission Limit, 401 KAR 59:015 Section 5.(1)(c)2.; $1.70 = 7.7223 * (8.369 + 8.165 + 8.165 + 8.375 + 3.38 + 1.66 + 1.66)^{-0.4106}$

Emission Point 04 Back-up Boiler for Industrial (Polyken)				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM	0.42 lb/MMBtu	401 KAR 59:015, Section 4(1)(c)	AP-42 Chapter 1.4.	Assumed based upon natural gas combustion
Opacity	20% opacity	401 KAR 59:015,	N/A	Assumed based upon

Emission Point 04 Back-up Boiler for Industrial (Polyken)				
		Section 4(2)		natural gas combustion
SO_2	1.82 lbs/MMBtu	401 KAR 59:015, Section 5(1)	AP-42 Chapter 1.4.	Assumed based upon natural gas combustion

Initial Construction Date : 1976

Process Description:
One natural gas fired boiler, 8.369 MMBtu/hr.

Applicable Regulation:
401 KAR 59:015, *New Indirect Heat Exchangers* applies to indirect heat exchangers having a heat input capacity greater than one (1) million BTU per hour (MMBTU/hr) commenced on or after April 9, 1972, for an affected facility with a capacity of 250 MMBTU/hr heat input or less

401 KAR 63:002, Section 2.(4)(iiii), 40 C.F.R. 63.7480 to 63.7575, Tables 1 to 13 (Subpart DDDDD), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* applies to new, reconstructed, and existing industrial, commercial, or institutional boilers or process heaters, located at a major source of hazardous air pollutants.

Comments:
Allowable emissions for the units are calculated using 401 KAR 59:015, Section 3(1) using the total rated heat input capacity of all affected facilities at a source.

PM Emission Limit, 401 KAR 59:015 Section 4.(1)(c); $0.42 = 0.9634 * (8.369 + 8.375 + 8.375 + 8.375)^{-0.2356}$
Sulfur Dioxide Emission Limit, 401 KAR 59:015 Section 5.(1)(c)2.; $1.82 = 7.7223 * (8.369 + 8.375 + 8.375 + 8.375)^{-0.4106}$

Emission Point 05, 06a, and 06b No. 5-7 Calender Boiler for (Industrial Polyken)				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM	0.40 lb/MMBtu	401 KAR 59:015, Section 4(1)(c)	AP-42 Chapter 1.4.	Assumed based upon natural gas combustion
Opacity	20% opacity	401 KAR 59:015, Section 4(2)	N/A	Assumed based upon natural gas combustion
SO_2	1.69 lbs/MMBtu	401 KAR 59:015, Section 5(1)	AP-42 Chapter 1.4.	Assumed based upon natural gas combustion

Initial Construction Date : 1993 for each

Process Description:
Three natural gas fired boilers. EU 05 is 3.38 MMBtu/hr, EU 06a is 1.66 MMBtu/hr, and EU 06b is 1.66 MMBtu/hr.

Applicable Regulation:
401 KAR 59:015, *New Indirect Heat Exchangers* applies to indirect heat exchangers having a heat input capacity greater than one (1) million BTU per hour (MMBTU/hr) commenced on or after April 9, 1972, for

Emission Point 05, 06a, and 06b No. 5-7 Calender Boiler for (Industrial Polyken)

an affected facility with a capacity of 250 MMBTU/hr heat input or less

401 KAR 63:002, Section 2.(4)(iiii), 40 C.F.R. 63.7480 to 63.7575, Tables 1 to 13 (Subpart DDDDD), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* applies to new, reconstructed, and existing industrial, commercial, or institutional boilers or process heaters, located at a major source of hazardous air pollutants.

Comments:
Allowable emissions for the units are calculated using 401 KAR 59:015, Section 3(1) using the total rated heat input capacity of all affected facilities at a source.

PM Emission Limit, 401 KAR 59:015 Section 4.(1)(c); $0.40 = 0.9634 * (8.369 + 8.375 + 8.375 + 8.375 + 3.38 + 1.66 + 1.66)^{-0.2356}$
Sulfur Dioxide Emission Limit, 401 KAR 59:015 Section 5.(1)(c)2.; $1.69 = 7.7223 * (8.369 + 8.375 + 8.375 + 8.375 + 3.38 + 1.66 + 1.66)^{-0.4106}$

Emission Point 02 Back-up Boiler for Specialty Adhesives

Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
PM	0.71 lb/MMBtu	401 KAR 61:015, Section 4(1)(a)	AP-42 Chapter 1.4.	Assumed based upon natural gas combustion
Opacity	40% opacity	401 KAR 61:015, Section 4(1)(c)	N/A	Assumed based upon natural gas combustion
SO_2	5.6 lbs/MMBtu	401 KAR 61:015, Section 5(1)	AP-42 Chapter 1.4.	Assumed based upon natural gas combustion

Initial Construction Date : 1962

Process Description:
One natural gas fired boiler, 8.375 MMBtu/hr.

Applicable Regulation:
401 KAR 61:015. *Existing indirect heat exchangers* applies to indirect heat exchangers having a heat input capacity greater than one (1) million BTU per hour (MMBTU/hr) commenced before April 9, 1972, for an affected facility with a capacity of 250 MMBTU/hr heat input or less

401 KAR 63:002, Section 2.(4)(iiii), 40 C.F.R. 63.7480 to 63.7575, Tables 1 to 13 (Subpart DDDDD), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* applies to new, reconstructed, and existing industrial, commercial, or institutional boilers or process heaters, located at a major source of hazardous air pollutants.

Comments:
Simpson County is a priority III region for particulate matter pursuant to 401 KAR 50:020. Simpson County is also a class V county with respect to sulfur dioxide.

PM Emission Limit, 401 KAR 61:015 Section 4.(1)(a); $0.71 = 1.3152 * (8.375 + 8.375)^{-0.2159}$

Emission Point 02 Back-up Boiler for Specialty Adhesives
Sulfur Dioxide Emission Limit, 401 KAR 61:015 Section 5.(1).; $5.6 = 8.0189 * (8.375 + 8.375)^{-0.1260}$

Emission Point #82 Spreadline #5				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
VOC	Less than 15% by weight of net VOC input shall be emitted	401 KAR 59:210, Section 3	Material Balance & MSDS	Thermal Oxidizer (TO) #1 Testing, 100% Capture 98% DRE
	90% VOC emission reduction,	40 CFR 60.442(a)(2)		
HAP	Coating materials must be less than 4% Organic HAP	40 CFR 63 Subpart JJJJ	Material Balance & MSDS	Thermal Oxidizer (TO) #1 Testing, 100% Capture 98% DRE
	or 95% organic HAP emission reduction			

Initial Construction Date : 1996

Process Description:
Spreadline #5 applies adhesive and primer to various tapes. Included in this emission point are mixers, a substrate unwind station, a primer booth enclosure, a coater booth enclosure, a natural gas-fired oven with heat input of 25.2 MMBtu/hr (EP #62a), and a tape rewind station. VOC emissions are controlled using a natural gas-fired recuperative thermal oxidizer (EP #62b) rated at 15 MMBtu/hr. A corona treater was installed in September 2004 to increase the dyne levels (surface tension) on foam backed tapes.

Applicable Regulation:
401 KAR 59:210, *New fabric, vinyl and paper surface coating operations* applies to each coating line for fabric, vinyl, or paper commenced on or after June 24, 1992 which is a part of a major source located in a county or portion of a county designated attainment or marginal nonattainment for ozone in 401 KAR 51:010

401 KAR 60:005, Section 2.(2)(xx), 40 C.F.R. 60.440 to 60.447 (Subpart RR), *Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations* applies to each coating line used in the manufacture of pressure sensitive tape and label materials.

401 KAR 63:002, Section 2.(4)(ppp), 40 C.F.R. 63.3280 to 63.3420, Tables 1 to 2 (Subpart JJJJ), *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating* applies to each new and existing facility that is a major source of HAP at which web coating lines are operated

40 CFR Part 64, *Compliance Assurance Monitoring* applies to EP 82 for VOC. This regulation applies to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit

Emission Point #82 Spreadline #5

satisfies all of the following criteria:
(1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under paragraph (b)(1) of 40 CFR 64.2;
(2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and
(3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this paragraph, "potential pre-control device emissions" shall have the same meaning as "potential to emit," as defined in 40 CFR 64.1, except that emission reductions achieved by the applicable control device shall not be taken into account.
40 CFR 60, Subpart RR, Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations is a regulation that was proposed before November 15, 1990 and subsequently emission limitations contained within this regulation are not exempt from 40 CFR Part 64. The standards proposed by 401 KAR 59:210, New fabric, vinyl and paper surface coating operations, are federally enforceable and subsequently are also not exempt.

Comments:
Emissions from natural gas combustion are calculated using AP-42 factors. Emissions for coating use are from engineering calculations and estimated process use information provided prior to 2004. The mixers are not in the permanent total enclosure.

The source has opted for an alternative operating scenario for compliance with 40 CFR 63 Subpart JJJJ. The facility may use coating materials less than 4% organic HAP or control 95% of organic HAP emissions.

Spreadline 5 is equipped with various sensors and other control systems for the purpose of assuring proper operation of the continuous fume capture system when solvent-based adhesives are applied. The sensors and other devices are integrated such that the input from these sensors is continuously polled. If the appropriate signals from the sensors are not received, the machine will enter into an alarm condition as a prelude to an automatic machine shutdown that will follow if the alarm condition is not addressed as defined in the CAM plan and corrected.

Emission Point #94 Hot Melt Feed System, Emission Point #98 Hot Melt Adhesive Coating Lines, Emission Points #44, 45, 52, 55, 56b, 101 Polyken Calender Lines

Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
PM	Varies	401 KAR 59:010 Section 3(2)	N/A	Dust Collector and Fabric Filter Visual Inspections
Opacity	20% opacity	401 KAR 59:010, Section 3(1)	N/A	Weekly Stack Visual Observation
HAP	Coating materials must be less than 4% Organic HAP	40 CFR 63 Subpart JJJJ	Material Balance & MSDS	N/A

Emission Point #94 Hot Melt Feed System, Emission Point #98 Hot Melt Adhesive Coating Lines, Emission Points #44, 45, 52, 55, 56b, 101 Polyken Calender Lines				
	or 95% organic HAP emission reduction			

Initial Construction Date : EU #94 2000, EU #98 2006, EU #44 1957, EU #45 1957, EU #52 1957, EU #55 1957, EU #56b 1988, EU #101 2010

Process Description:
Adhesive and rubber coating activities. EU 94 also includes polyethylene extrusion as a part of the Hot melt line.

Applicable Regulation:
401 KAR 59:010, *New process operations* applies to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulates in 401 KAR Chapter 59, commenced on or after the July 2, 1975.

401 KAR 63:002, Section 2.(4)(ppp), 40 C.F.R. 63.3280 to 63.3420, Tables 1 to 2 (Subpart JJJJ), *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating* applies to each new and existing facility that is a major source of HAP at which web coating lines are operated

Comments:
These are small extrusion lines that use no coatings with VOC and HAP constituents, but are part of the affected source for 40 CFR 63, Subpart JJJJ, Paper and Other Web Coating MACT.

EU #101 and 94 are the only units with particulate matter control equipment. The dust collector's condition is monitored using weekly visual inspection. For the purpose of calculating PTE, 99% particulate matter control efficiency was assumed for the EU #101 dust collector and 99.9% for the EU 94 fabric filter.

Pursuant to 40 CFR 63.3300 an affected source according to 40 CFR 63, Subpart JJJJ, "is the collection of all web coating lines at your facility." The collection of all coating lines is an existing affected source, even if some of those coating activities within the affected source would have been considered new on their own pursuant to 40 CFR 63 Subpart JJJJ.

EU #94 Hot Melt Extrusion Line Description
This hot melt extrusion line is comprised of a hot melt adhesive extruder, two calender lines, and one polyethylene extruder. Hot melt adhesive is mixed and applied to a web substrate, which might then be coated with a polyethylene plastic coating. Calender line #14 is associated with the plastic coating, and no plastic coating occurs at line #2.

EU #101 Calender Line Description
This emission point consists of four stations: Adhesive making, Casting, Coating, and Calendering.
In Adhesive making: Natural rubber is fed into an enclosed machine where additives, oil and tackifying resins are added to make the rubber based adhesive. A dust collector was installed to collect the particulate from the automated feeder system. In Casting: Polyethylene will be extruded and cast into tape backing. In Coating, after the casting station, the web will be coated with a water-based release coating solution using a continuous and automatic rotogravure printer. The coating will then be dried in a 3.85 MMBtu/hr natural gas-fired oven. In Calendaring, after the release coating station, the release coated web is then fed into the

Emission Point #94 Hot Melt Feed System, Emission Point #98 Hot Melt Adhesive Coating Lines, Emission Points #44, 45, 52, 55, 56b, 101 Polyken Calender Lines
calendering station, where the adhesive made at the adhesive making station is then calendered onto the backing creating the final drum of tape using continuous automatic roll coater. On April 15, 2011 two 15kW corona treaters, which emit ozone, were added to the line. Maximum Capacity: 30 lb/hr

Emission Point #59 Foil and Film Printer				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
VOC	Coating materials must be less than 25% VOC and greater than 75% water	401 KAR 59:212, Section 6(1)	Material Balance & MSDS	Recordkeeping Requirements
HAP	Less than 400 kg per month of organic HAP emissions	40 CFR 63 Subpart KK	Material Balance & MSDS	Recordkeeping Requirements

Initial Construction Date : 1993

Process Description:
Flexographic film and foil printer.

Applicable Regulation:
401 KAR 59:212, *New graphic arts facilities using rotogravure and flexography* applies to each printing line for packaging rotogravure, specialty rotogravure, and flexographic printing commenced on or after June 24, 1992 which is part of a major source located in a county or portion of a county designated attainment or marginal nonattainment for ozone in 401 KAR 51:010

401 KAR 63:002, Section 2.(4)(aa), 40 C.F.R. 63.820 to 63.831, Table 1, and Appendix A (Subpart KK), *National Emission Standards for the Printing and Publishing Industry* applies to each new and existing facility that is a major source of hazardous air pollutants at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated

Comments:
Emissions are calculated using material balances.

Emission Point #30 Nauta Primer Mixer/Condenser, EU #31 Primer Fill and Transfer Operations				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
VOC	Undiluted and uncontrolled emission streams from process vessel vents shall be less than 50 ppmv HAP	40 CFR 63 Subpart HHHHH	Engineering Estimations	EPA Method TO-15 Testing

Initial Construction Date : EU #30 1969, EU #31 1978

Process Description:
The Nauta Mixer mixes various solvents, rubber, and resins together to create a primer used for pipeline application. The primer is applied to pipelines prior to pipeline tape application. Once the pipeline is primed with this primer, an adhesive tape is wrapped around the pipe for corrosion protection.

Applicable Regulation:
401 KAR 63:002, Section 2.(4)(mmmm), 40 C.F.R. 63.7980 to 63.8105, Tables 1 to 10 (Subpart HHHHH), *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing* applies to miscellaneous coating manufacturing operations, that are located at or are part of a major source of hazardous air pollutant emissions. This facility does not utilize materials containing metal HAP in these emission points.

Comments:
The Nauta Mixer is a 1200 gal mixer with a condenser. The condenser is considered a process condenser pursuant to 40 CFR 63.1251 and therefore, pursuant to 40 CFR 63.8005(c) the condenser is not a control device for the process vessel. 40 CFR 63, Subpart HHHHH requires the mixer to be equipped with a tightly fitting vented cover or lid. Because emissions from the vent have been demonstrated to be less than 50 ppmv HAP, the vent is not a process vessel vent and additional controls are not required. Table 1 to 40 CFR 63 Subpart HHHHH itself is not specifically clear in the regulation that the controls are meant for process vessel vents as defined in the Subpart HHHHH regulation. However, an applicability flowchart provided by the EPA conveys vented emission streams containing HAP concentrations < 50 ppmv do not require further controls. The *Applicability flowchart for process vessels (figure 2)* can currently be found at the following website: https://www.epa.gov/sites/default/files/2015-06/documents/figure2.pdf

EP #122 Powercrete Production and Packaging (found in Section C) is not subject to 40 CFR 63 Subpart HHHHH because the mixture does not contain HAP.

Emission Point #113 Diesel Emergency Generator and #111 Natural Gas Emergency Generator

Initial Construction Date: EP #113 1976; EP #111 2004

Process Description:
Two emergency generators

Emission Point #113 Diesel Emergency Generator and #111 Natural Gas Emergency Generator

Applicable Regulation:
401 KAR 63:002 Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* applies to stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand

Comments:
EP 113 Diesel Emergency Generator
Manufactured by Detroit Diesel
Primary Fuel: Diesel
Maximum rated capacity: 175 hp

EP 111 Natural Gas Emergency Generator
Manufactured by Cummins
Primary Fuel: Natural Gas
Maximum rated capacity: 126 hp

Comments:
Emissions are calculated using AP-42 emission factors, 40 CFR 98, Subpart C, and using 500 hours/yr to account for emergency operation.

Emission Point #121 and #127 Natural Gas Emergency Generators

Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
NO_x + HC	10 g/HP-hr	40 CFR 60.4243(b)(1) or (2)	N/A	Recordkeeping Requirements
CO	387 g/HP-hr	40 CFR 60.4243(b)(1) or (2)	N/A	Recordkeeping Requirements

Initial Construction Date: EP #121 2016, EP#127 11/2019

Process Description:
Two natural gas emergency generators

Applicable Regulation:
401 KAR 60:005, Section 2.(2)(eeee), 40 C.F.R. 60.4230 to 60.4248, Tables 1 to 4 (Subpart JJJJ), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* applies to owners and operators of stationary spark ignition internal combustion engines that commence construction after June 12, 2006

Emission Point #121 and #127 Natural Gas Emergency Generators

401 KAR 63:002 Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* applies to stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand

Comments:
EP 121 Natural Gas Emergency Generator
Manufactured by Generac
Primary Fuel: Natural Gas
Maximum rated capacity: 29.5 hp

EP 127 Natural Gas Emergency Generator
Manufactured by Generac
Primary Fuel: Natural Gas
Maximum rated capacity: 29.5 hp

Comments:
Emissions are calculated using AP-42 emission factors, 40 CFR 98, Subpart C, and using 500 hours/yr to account for emergency operation.

Emission Point # 123, 9 Cold Cleaners

Initial Construction Date: Unknown

Process Description:
9 Miscellaneous Manual Parts Washers

Applicable Regulation:
401 KAR 59:185, *New solvent metal cleaning equipment* applies to cold cleaners, open top vapor degreasers, and conveyorized degreasers that utilize volatile organic compounds (VOCs) to remove soluble impurities from metal surfaces commenced on or after June 29, 1979 that is part of a major source located in a county or portion of a county designated attainment or marginal nonattainment for ozone in 401 KAR 51:010.

State-Origin Requirements:
401 KAR 63:020, *Potentially hazardous matter or toxic substances* applies to each affected facility which emits or may emit potentially hazardous matter or toxic substances provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality

Comments:
9 parts washers about 35 gallons each. PTE was calculated assuming 4 changeouts per year with 75% loss of solvent per changeout. Two units use toluene.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)

Testing Requirements\Results

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU 82	RTO #1	VOC and organic HAP DRE	401 KAR 60:005; 40 CFR 60 Subpart RR 401 KAR 63:002 40 CFR 63 Subpart JJJJ	Initial and every 5 years	Method 25	90% VOC and 95% for HAPs	98.8%	Combustion Temperature 1330 °F	CMN20130003	12/10/2013
EU 82	RTO #1	VOC Capture	401 KAR 60:005; 40 CFR 60 Subpart RR 401 KAR 63:002; 40 CFR 63 Subpart JJJJ	Initial	Method 204	N/A	100%	N/A	CMN20130003	12/10/2013

EU 82	RTO #1	VOC and organic HAP DRE	401 KAR 60:005; 40 CFR 60 Subpart RR 401 KAR 63:002 40 CFR 63 Subpart JJJJ	Initial and every 5 years	Method 25	90% VOC and 95% for HAPs	99.4%	Combustion Temperature 1345 °F	CMN20180001	11/20/2018
EU 82	RTO #1	VOC and organic HAP DRE	401 KAR 60:005; 40 CFR 60 Subpart RR 401 KAR 63:002 40 CFR 63 Subpart JJJJ	Initial and every 5 years	Method 25	90% VOC and 95% for HAPs	98.49%	Combustion Temperature 1345 °F	CMN20230001	10/31/2023

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Unit
Coating materials must be less than 4% Organic HAP *or* 95% organic HAP emission reduction	401 KAR 63:002, Section 2.(4)(ppp), 40 C.F.R. 63.3280 to 63.3420, Tables 1 to 2 (Subpart JJJJ)	#44 #45 #52 #55 #56b #82 #94 #98 #101

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 59:010, *New Process Operations*	#44 #45 #52 #55 #56b #94 #98 #101
401 KAR 59:015, *New Indirect Heat Exchangers*	#01 #03 #04 #05 #06a #06b
401 KAR 59:185,*New solvent metal cleaning equipment*	#123
401 KAR 59:210, *New fabric, vinyl and paper surface coating operations,*	#82
401 KAR 59:212, *New graphic arts facilities using rotogravure and flexography*	#59
401 KAR 60:005, Section 2.(2)(xx), 40 CFR.60.440 to 60.447 (Subpart RR), *Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations*	#82
401 KAR 60:005, Section 2.(2)(eeee), 40 CFR.60.4230 to 60.4248, Tables 1 to 4 (Subpart JJJJ), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*	#121 #127
401 KAR 61:015, *Existing indirect heat exchangers*	#02
401 KAR 63:002, Section 2.(4)(aa), 40 C.F.R. 63.820 to 63.831, Table 1, and Appendix A (Subpart KK), *National Emission Standards for the Printing and Publishing Industry*	#59
401 KAR 63:002, Section 2.(4)(ppp), 40 CFR 63.3280 to 63.3420, Tables 1 to 2 (Subpart JJJJ), *National Emission Standards for Hazardous Air*	#44 #45 #52 #55 #56b #82

Pollutants: Paper and Other Web Coating	#94 #98 #101
401 KAR 63:002 Section 2(4)(eeee), 40 CFR 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*	#111 #113 #121 #127
401 KAR 63:002, Section 2.(4)(iiii), 40 CFR 63.7480 to 63.7575, Tables 1 to 13 (Subpart DDDDD), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*	#01 #02 #03 #04 #05 #06a #06b
401 KAR 63:002, Section 2.(4)(mmmm), 40 CFR 63.7980 to 63.8105, Tables 1 to 10 (Subpart HHHHH), *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing*	#30, #31
401 KAR 63:020, *Potentially hazardous matter or toxic substances*	#123
40 CFR 64, *Compliance assurance monitoring (CAM)*	#82

Table C - Summary of Precluded Regulations:

Precluded Regulations	Emission Unit
N/A	

Table D - Summary of Non Applicable Regulations:

Non Applicable Regulations	Emission Unit
N/A	

Air Toxic Analysis
N/A

Single Source Determination
N/A

SECTION 5 – PERMITTING HISTORY

Permit	Permit Type	Activity#	Complete Date	Issuance Date	Summary of Action	PSD/Syn Minor
V-06-023	Initial Issuance	APE20040003	1/9/2004	4/11/2007	Initial Operating Permit	N/A
V-13-003	Renewal	APE20110003	12/12/2011	6/14/2013	Renewal	N/A
V-18-008	Renewal	APE20170008	2/15/2018	11/18/2018	Permit Renewal	N/A

SECTION 6 – PERMIT APPLICATION HISTORY

N/A

APPENDIX A – ABBREVIATIONS AND ACRONYMS

AAQS – Ambient Air Quality Standards
BACT – Best Available Control Technology
Btu – British thermal unit
CAM – Compliance Assurance Monitoring
CO – Carbon Monoxide
Division – Kentucky Division for Air Quality
ESP – Electrostatic Precipitator
GHG – Greenhouse Gas
HAP – Hazardous Air Pollutant
HF – Hydrogen Fluoride (Gaseous)
MSDS – Material Safety Data Sheets
mmHg – Millimeter of mercury column height
NAAQS – National Ambient Air Quality Standards
NESHAP – National Emissions Standards for Hazardous Air Pollutants
NO_x – Nitrogen Oxides
PM – Particulate Matter
PM_{10} – Particulate Matter equal to or smaller than 10 micrometers
$PM_{2.5}$ – Particulate Matter equal to or smaller than 2.5 micrometers
PSD – Prevention of Significant Deterioration
PTE – Potential to Emit
SO_2 – Sulfur Dioxide
TF – Total Fluoride (Particulate & Gaseous)
VOC – Volatile Organic Compounds